



[4910-13-P]

DEPARTMENT OF TRANSPORTATION

Federal Aviation Administration

14 CFR Part 39

[Docket No. FAA-2015-8432; Directorate Identifier 2015-NM-100-AD; Amendment 39-18570; AD 2016-13-06]

RIN 2120-AA64

Airworthiness Directives; Saab AB, Saab Aeronautics (Type Certificate Previously Held by Saab AB, Saab Aerosystems) Airplanes

AGENCY: Federal Aviation Administration (FAA), Department of Transportation (DOT).

ACTION: Final rule.

SUMMARY: We are adopting a new airworthiness directive (AD) for certain Saab AB, Saab Aeronautics Model 340A (SAAB/SF340A) and SAAB 340B airplanes. This AD was prompted by reports of ruptured horizontal stabilizer de-icing boots. This AD requires a revision of the applicable airplane flight manual (AFM), repetitive inspections of the horizontal stabilizer de-icing boots, and applicable corrective actions. We are issuing this AD to detect and correct damage of the de-icing boot; such damage could lead to a ruptured boot, severe vibrations, and possible reduced control of the airplane.

DATES: This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

The Director of the Federal Register approved the incorporation by reference of certain publications listed in this AD as of [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

ADDRESSES: For service information identified in this final rule, contact Saab AB, Saab Aeronautics, SE-581 88, Linköping, Sweden; telephone +46 13 18 5591; fax +46 13 18 4874; email saab340techsupport@saabgroup.com; Internet <http://www.saabgroup.com>. You may view this referenced service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221. It is also available on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-8432.

Examining the AD Docket

You may examine the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-8432; or in person at the Docket Management Facility between 9 a.m. and 5 p.m., Monday through Friday, except Federal holidays. The AD docket contains this AD, the regulatory evaluation, any comments received, and other information. The street address for the Docket Office (telephone 800-647-5527) is Docket Management Facility, U.S. Department of Transportation, Docket Operations, M-30, West Building Ground Floor, Room W12-140, 1200 New Jersey Avenue SE., Washington, DC 20590.

FOR FURTHER INFORMATION CONTACT: Shahram Daneshmandi, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA,

1601 Lind Avenue SW., Renton, WA 98057-3356; telephone (425) 227-1112;
fax (425) 227-1149.

SUPPLEMENTARY INFORMATION:

Discussion

We issued a notice of proposed rulemaking (NPRM) to amend 14 CFR part 39 by adding an AD that would apply to certain Saab AB, Saab Aeronautics Model 340A (SAAB/SF340A) and SAAB 340B airplanes. The NPRM published in the Federal Register on January 13, 2016 (81 FR 1588) (“the NPRM”). The NPRM was prompted by reports of ruptured horizontal stabilizer de-icing boots. The NPRM proposed to require a revision of the applicable AFM, repetitive inspections of the horizontal stabilizer de-icing boots, and applicable corrective actions. We are issuing this AD to detect and correct damage of the de-icing boot; such damage could lead to a ruptured boot, severe vibrations, and possible reduced control of the airplane.

The European Aviation Safety Agency (EASA), which is the Technical Agent for Member States of the European Union, has issued EASA Airworthiness Directive 2015-0129, dated July 6, 2015 (referred to after this as the Mandatory Continuing Airworthiness Information, or “the MCAI”), to correct an unsafe condition for certain Saab AB, Saab Aeronautics Model 340A (SAAB/SF340A) and SAAB 340B airplanes.

The MCAI states:

There have been some reported events of ruptured horizontal stabilizer de-icing boots. In-flight rupture of a de-icing boot will result in complete loss of the de-icing function within its associated zone. In addition, in some of these events, the de-icing boot had formed a large open scoop.

This condition, if not detected and corrected, could lead to severe vibrations, possibly resulting in reduced control of the aeroplane.

To address this potential unsafe condition, SAAB issued Alert Operations Bulletin (AOB) No.12 and AOB No. 23 as a temporary measure, recommending performing a flap 0 landing in the event of a suspected rupture of the de-icing boot on the horizontal stabilizer.

In addition, SAAB issued SB 340-30-094 to provide instructions to inspect the affected de-icing boots.

For the reasons described above, this [EASA] AD requires an amendment of the applicable Airplane Flight Manual (AFM) and, pending the development of a modification by SAAB, repetitive inspections of the horizontal stabilizer de-icing boots and, depending on findings, accomplishment of applicable corrective action(s).

This [EASA] AD is considered to be an interim action and further AD action may follow.

You may examine the MCAI in the AD docket on the Internet at

<http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-8432.

Comments

We gave the public the opportunity to participate in developing this AD. The following presents the comments received on the NPRM and the FAA's response to each comment.

Request to Revise Paragraph (g) to Allow Later Approved Revisions of AFMs

Saab AB, Saab Aeronautics requested that we revise paragraph (g) of the proposed AD to state that the use of later-approved revisions of the applicable AFMs is also acceptable for compliance with the proposed AD.

We do not agree. When referring to specific service information in an AD, using the phrase, “or later FAA-approved revisions,” violates Office of the Federal Register regulations for approving materials that are incorporated by reference. However, affected operators may request approval to use a later revision of the referenced service information as an alternative method of compliance, under the provisions of paragraph (i)(1) of this AD. We have not changed this AD in this regard.

Request to Expand Description of Inspection

Saab AB, Saab Aeronautics also requested that we revise paragraph (h) of the proposed AD to explain that the inspection is not only for damage, but also for existing repairs. The commenter stated that the inspection of existing repairs is described in Saab Service Bulletin 340-30-094, dated March 27, 2015, but missing from paragraph (h) of the proposed AD.

We agree with the request. The referenced service information specifies inspecting for damage of the de-icing boots, and a sub-step specifies to “make sure that already made repairs are within specified limits.” That action was not specifically stated in the proposed AD. We have clarified the requirement by changing paragraph (h) of this AD to ensure that de-icing boots as well as existing repairs are within specified limits.

Request to Change the Repetitive Inspection Interval to 600 Flight Hours

PenAir requested a change to the repetitive inspection interval. The commenter requested that the repetitive inspection interval be increased from the proposed 400-flight-hour interval to a 600-flight-hour interval. The commenter also stated that in the event that a 600-flight-hour interval is determined to be unsuitable, then a

450-flight-hour interval should be used. The commenter stated that this change would align with scheduled E-check inspections, alleviate the undue burden of creating maintenance outside of scheduled computerized aircraft maintenance program inspections, and maintain safe operation of the airplane.

We do not agree with the commenter's request to extend the compliance time. We have determined that the compliance time, as proposed, represents the maximum interval of time allowable for the affected airplanes to continue to operate safely before the next inspection is required. In addition, since maintenance schedules vary among operators, there would be no assurance that a different interval would satisfy all operators' schedules. However, under the provisions of paragraph (i)(1) of this AD, we will consider requests for approval of an extension of the compliance time if sufficient data are submitted to substantiate that the new compliance time would provide an acceptable level of safety. We have not changed this AD in this regard.

Conclusion

We reviewed the relevant data, considered the comments received, and determined that air safety and the public interest require adopting this AD with the changes described previously and minor editorial changes. We have determined that these minor changes:

- Are consistent with the intent that was proposed in the NPRM for correcting the unsafe condition; and
- Do not add any additional burden upon the public than was already proposed in the NPRM.

We also determined that these changes will not increase the economic burden on any operator or increase the scope of this AD.

Related Service Information under 1 CFR part 51

We reviewed Saab Service Bulletin 340-30-094, dated March 27, 2015. The service information describes procedures for repetitive detailed inspections of the de-icing boots installed on the horizontal stabilizers, and repair and replacement of damaged de-icing boots.

We also reviewed the following AFMs, which describe performance limitations and general data:

- Saab AFM 340A 001, Revision 57, dated March 27, 2015.
- Saab AFM 340B 001, Revision 35, dated March 27, 2015.
- Saab AFM 340B 010, Revision 28, dated March 27, 2015.

This service information is reasonably available because the interested parties have access to it through their normal course of business or by the means identified in the ADDRESSES section.

Costs of Compliance

We estimate that this AD affects 92 airplanes of U.S. registry.

We also estimate that it will take about 6 work-hours per product to comply with the basic requirements of this AD. The average labor rate is \$85 per work-hour. Required parts will cost about \$0 per product. Based on these figures, we estimate the cost of this AD on U.S. operators to be \$46,920, or \$510 per product.

In addition, we estimate that any necessary follow-on actions would take about 6 work-hours and require parts costing \$9,500, for a cost of \$10,010 per product. We have no way of determining the number of aircraft that might need these actions.

Authority for this Rulemaking

Title 49 of the United States Code specifies the FAA's authority to issue rules on aviation safety. Subtitle I, section 106, describes the authority of the FAA Administrator. "Subtitle VII: Aviation Programs," describes in more detail the scope of the Agency's authority.

We are issuing this rulemaking under the authority described in "Subtitle VII, Part A, Subpart III, Section 44701: General requirements." Under that section, Congress charges the FAA with promoting safe flight of civil aircraft in air commerce by prescribing regulations for practices, methods, and procedures the Administrator finds necessary for safety in air commerce. This regulation is within the scope of that authority because it addresses an unsafe condition that is likely to exist or develop on products identified in this rulemaking action.

Regulatory Findings

We determined that this AD will not have federalism implications under Executive Order 13132. This AD will not have a substantial direct effect on the States, on the relationship between the national government and the States, or on the distribution of power and responsibilities among the various levels of government.

For the reasons discussed above, I certify that this AD:

1. Is not a "significant regulatory action" under Executive Order 12866;

2. Is not a “significant rule” under the DOT Regulatory Policies and Procedures (44 FR 11034, February 26, 1979);

3. Will not affect intrastate aviation in Alaska; and

4. Will not have a significant economic impact, positive or negative, on a substantial number of small entities under the criteria of the Regulatory Flexibility Act.

List of Subjects in 14 CFR Part 39

Air transportation, Aircraft, Aviation safety, Incorporation by reference, Safety.

Adoption of the Amendment

Accordingly, under the authority delegated to me by the Administrator, the FAA amends 14 CFR part 39 as follows:

PART 39 - AIRWORTHINESS DIRECTIVES

1. The authority citation for part 39 continues to read as follows:

Authority: 49 U.S.C. 106(g), 40113, 44701.

§ 39.13 [Amended]

2. The FAA amends § 39.13 by adding the following new airworthiness directive (AD):

2016-13-06 Saab AB, Saab Aeronautics (Type Certificate Previously Held by Saab AB, Saab Aerosystems): Amendment 39-18570. Docket No. FAA-2015-8432; Directorate Identifier 2015-NM-100-AD.

(a) Effective Date

This AD is effective [INSERT DATE 35 DAYS AFTER DATE OF PUBLICATION IN THE FEDERAL REGISTER].

(b) Affected ADs

None.

(c) Applicability

This AD applies to Saab AB, Saab Aeronautics (Type Certificate Previously Held by Saab AB, Saab Aerosystems) airplanes, certificated in any category, identified in paragraphs (c)(1) and (c)(2) of this AD.

(1) Saab AB, Saab Aeronautics Model 340A (SAAB/SF340A) airplanes, serial numbers (S/Ns) 004 through 138 inclusive, on which Saab Modification 1462 has been embodied in production, or Saab Service Bulletin 340-55-008 has been embodied in service, except those on which Saab Modification 1793 has also been embodied in production, or Saab Service Bulletin 340-55-010 has been embodied in service; and Saab AB, Saab Aeronautics Model 340A (SAAB/SF340A) airplanes, S/Ns 139 through 159 inclusive. Applicable Saab AB, Saab Aeronautics Model 340A (SAAB/SF340A) airplanes S/N 004-138, Post Modification No. 1462 but Pre Modification No. 1793, have a maximum flap setting of 35 degrees instead of 20 degrees, and horizontal stabilizer boots with spanwise tubes instead of chordwise tubes.

(2) Saab AB, Saab Aeronautics Model SAAB 340B airplanes, S/Ns 160 through 459 inclusive.

(d) Subject

Air Transport Association (ATA) of America Code 30, Ice and Rain Protection.

(e) Reason

This AD was prompted by reports of ruptured horizontal stabilizer de-icing boots. We are issuing this AD to detect and correct damage of the de-icing boot; such damage could lead to a ruptured boot, severe vibrations, and possible reduced control of the airplane.

(f) Compliance

Comply with this AD within the compliance times specified, unless already done.

(g) Revision of the Airplane Flight Manual (AFM)

Within 30 days after the effective date of this AD, revise the “Abnormal Procedures” section of the applicable Saab 340 AFM to incorporate the revision specified in paragraphs (g)(1) through (g)(3) of this AD.

(1) For Saab AB, Saab Aeronautics Model 340A (SAAB/SF340A) airplanes, revise AFM 340A 001 by incorporating Revision 57, dated March 27, 2015.

(2) For Saab AB, Saab Aeronautics Model SAAB 340B airplanes, revise AFM 340B 001 by incorporating Revision 35, dated March 27, 2015.

(3) For Saab AB, Saab Aeronautics Model SAAB 340B airplanes with extended wing tips, revise AFM 340B 010 by incorporating Revision 28, dated March 27, 2015.

(h) Inspection/Replacement

Within 400 flight hours or 6 months, whichever occurs first after the effective date of this AD, do a detailed inspection for damage of the horizontal stabilizer de-icing boots, and existing repairs of horizontal stabilizer de-icing boots, in accordance with the Accomplishment Instructions of Saab Service Bulletin 340-30-094, dated March 27,

2015. Repeat the inspection thereafter at intervals not to exceed 400 flight hours. If, during any inspection required by this paragraph, any damage or existing repair outside the limits specified in Saab Service Bulletin 340-30-094, dated March 27, 2015, is found, before further flight, repair or replace the horizontal stabilizer de-icing boots, in accordance with the Accomplishment Instructions of Saab Service Bulletin 340-30-094, dated March 27, 2015. Repair or replacement on an airplane of the horizontal stabilizer de-icing boots, as required by this paragraph, does not constitute terminating action for the repetitive inspections required by this paragraph for that airplane.

(i) Other FAA AD Provisions

The following provisions also apply to this AD:

(1) Alternative Methods of Compliance (AMOCs): The Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA, has the authority to approve AMOCs for this AD, if requested using the procedures found in 14 CFR 39.19. In accordance with 14 CFR 39.19, send your request to your principal inspector or local Flight Standards District Office, as appropriate. If sending information directly to the International Branch, send it to ATTN: Shahram Daneshmandi, Aerospace Engineer, International Branch, ANM-116, Transport Airplane Directorate, FAA, 1601 Lind Avenue SW., Renton, WA 98057-3356; telephone 425-227-1112; fax 425-227-1149. Information may be emailed to: 9-ANM-116-AMOC-REQUESTS@faa.gov. Before using any approved AMOC, notify your appropriate principal inspector, or lacking a principal inspector, the manager of the local flight standards district office/certificate holding district office. The AMOC approval letter must specifically reference this AD.

(2) Contacting the Manufacturer: For any requirement in this AD to obtain corrective actions from a manufacturer, the action must be accomplished using a method approved by the Manager, International Branch, ANM-116, Transport Airplane Directorate, FAA; or the European Aviation Safety Agency (EASA); or Saab AB, Saab Aeronautics' EASA Design Organization Approval (DOA). If approved by the DOA, the approval must include the DOA-authorized signature.

(j) Related Information

Refer to Mandatory Continuing Airworthiness Information (MCAI) EASA Airworthiness Directive 2015-0129, dated July 6, 2015, for related information. This MCAI may be found in the AD docket on the Internet at <http://www.regulations.gov> by searching for and locating Docket No. FAA-2015-8432.

(k) Material Incorporated by Reference

(1) The Director of the Federal Register approved the incorporation by reference (IBR) of the service information listed in this paragraph under 5 U.S.C. 552(a) and 1 CFR part 51.

(2) You must use this service information as applicable to do the actions required by this AD, unless this AD specifies otherwise.

(i) Saab Service Bulletin 340-30-094, dated March 27, 2015.

(ii) Saab AFM 340A 001, Revision 57, dated March 27, 2015.

(iii) Saab AFM 340B 001, Revision 35, dated March 27, 2015.

(iv) Saab AFM 340B 010, Revision 28, dated March 27, 2015.

(3) For service information identified in this AD, contact Saab AB, Saab Aeronautics, SE-581 88, Linköping, Sweden; telephone +46 13 18 5591; fax +46 13 18 4874; email saab340techsupport@saabgroup.com; Internet <http://www.saabgroup.com>.

(4) You may view this service information at the FAA, Transport Airplane Directorate, 1601 Lind Avenue SW., Renton, WA. For information on the availability of this material at the FAA, call 425-227-1221.

(5) You may view this service information that is incorporated by reference at the National Archives and Records Administration (NARA). For information on the availability of this material at NARA, call 202-741-6030, or go to: <http://www.archives.gov/federal-register/cfr/ibr-locations.html>.

Issued in Renton, Washington, on June 13, 2016.

Dionne Palermo,
Acting Manager,
Transport Airplane Directorate,
Aircraft Certification Service.

[FR Doc. 2016-14871 Filed: 6/24/2016 8:45 am; Publication Date: 6/27/2016]